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(FILE 'HOME' ENTERED AT 13:22:45 ON 30 JUN 1998)

FILE 'USPAT' ENTERED AT 13:22:55 ON 30 JUN 1998

Useful?

L1	12	S	DILATION## PROFILE#
L2	72	S	TRANSITION## PROFILE#
L3	139144	S	FLOOR####
L4	7	S	L2 AND L3
L5	5	S	FINISHING PROFILE#

=> d cit 1- L5

1. 5,511,872, Apr. 30, 1996, Building system for movables; Palle Clemmensen, 312/107, 108, 111, 198 [IMAGE AVAILABLE]

2. 5,031,107, Jul. 9, 1991, Numerical control apparatus for machining non-circular workpieces; Ikuo Suzuki, et al., 364/474.28; 318/571; 364/474.14, 474.29 [IMAGE AVAILABLE]

3. 4,291,564, Sep. 29, 1981, Method of and apparatus for rolling sheet steel profiles of different cross-sectional shape in universal beam rolling mill trains; Heinz Muckli, 72/234, 177, 225 [IMAGE AVAILABLE]

4. 3,948,122, Apr. 6, 1976, Automatic programmed profile lathes; Helmut Link, et al., 82/11.4 [IMAGE AVAILABLE]

5. 3,815,305, Jun. 11, 1974, FRAME CONSTRUCTION ASSEMBLY INCLUDING MODULE ELEMENTS FOR ERECTING BUILDINGS IN SECTIONS; Geir Grung, et al., 52/264, 281, 283 [IMAGE AVAILABLE]

=> d cit kwic 1- L5

1. 5,511,872, Apr. 30, 1996, Building system for movables; Palle Clemmensen, 312/107, 108, 111, 198 [IMAGE AVAILABLE]

US PAT NO: 5,511,872 [IMAGE AVAILABLE] L5: 1 of 5

DETDESC:

DETD(10)

FIGS. 138-168 illustrate table tops in different lengths and in different embodiments, possibly comprising edge lists or **finishing profiles** along one or more of the edges of the table top, and with the table tops manufactured for different materials. . .

2. 5,031,107, Jul. 9, 1991, Numerical control apparatus for machining non-circular workpieces; Ikuo Suzuki, et al., 364/474.28; 318/571; 364/474.14, 474.29 [IMAGE AVAILABLE]

US PAT NO: 5,031,107 [IMAGE AVAILABLE] L5: 2 of 5

ABSTRACT:
A . . . machining non-circular workpieces such as a cam and the like is disclosed. In the present invention, roughing profile data and

finishing profile data are generated from lift data regulating the shape of non-circular workpiece. The roughing profile data are obtained from roughing. . . angle are smaller than the predetermined value. Machinings are performed by the roughing profile data at roughing and by the **finishing profile** data at finishing. As a result, the high-speed machinings are possible and the machining cycle time can be shortened.

SUMMARY:

BSUM(8)

While, if the **finishing profile** data decided by the only finished data are used for the high-speed roughing, the feed position of the grinding wheel. . .

SUMMARY:

BSUM(14)

In order to attain the objects aforementioned, in the present invention, the roughing profile data and **finishing profile** data are obtained respectively to perform the roughing and finishing by respective profile data.

SUMMARY:

BSUM(18)

Also, from the lift data specifying the finished shape and the grindstone diameter, **finishing profile** data regulating the grinding wheel position relative to the rotational angle are prepared. On the basis of the roughing profile data or **finishing profile** data aforementioned, positions of the main spindle and the tool-feed shaft are controlled in synchronism to allow roughing or finishing. . .

DETDESC:

DETD(8)

An . . . the roughing lift data, a finishing lift data area 724 storing finishing lift data generated from the lift data, a **finishing profile** data area 725 storing **finishing profile** data generated from the finishing lift data, a rough tolerance data area 726 storing a tolerance of finishing allowances at. . .

DETDESC:

DETD(57)

As the roughing profile data were thus prepared, the CPU71 moves it procedure to Step 124 to prepare **finishing profile** data, wherein the present apparatus is set in a finishing data preparing mode and the CPU71 returns its procedure to. . .

DETDESC:

DETD(59)

Next, . . . 130 to read the existing grindstone diameter stored in the grindstone diameter data area 729, and then in Step 132, **finishing profile** data are obtained from the existing grindstone diameter and the finishing lift data stored in the finishing lift data area 724 in the same manner as preparing the aforesaid roughing profile data, and the **finishing profile** data are stored in the **finishing profile** data area 725 for CPU71 to complete all

procedures of the present program.

DETDESC:

DETD(65)

Next, the CPU71 moves to Step 206 to calculate **finishing profile** data from the existing grindstone diameter and finishing lift data stored in the finishing lift data area 724 so as to be stored in the **finishing profile** data area 725.

DETDESC:

DETD(66)

Then, . . . its procedure to Step 208, wherein the roughing profile data stored in the roughing profile data area 723 and the **finishing profile** data stored in the **finishing profile** data area 725 are transferred to the roughing NC profile data area 321 or the finishing NC profile data area. . .

DETDESC:

DETD(67)

Here, . . . procedure to Step 208 to transfer the roughing profile data stored in the roughing profile data area 723 and the **finishing profile** data stored in the **finishing profile** data area 725 as the initial values and to complete the program.

DETDESC:

DETD(74)

As . . . the rotational angle, or acceleration components are below the present value are obtained to prepare roughing profile data therefrom, preparing **finishing profile** data from the lift data and controlling a main spindle and a grinding wheel feed shaft numerically, by the roughing profile data at roughing and the **finishing profile** data at finishing. Accordingly, since machining is performed by the roughing profile data wherein the acceleration components are restrained at. . . eliminating cracks of the workpiece caused by heating. While, at the finishing cycle, since precise machinings can be effected by **finishing profile** data by reducing the revolution speed of the main spindle, machining errors can be minimized even when the acceleration components. . .

CLAIMS:

CLMS(1)

What . . .
in said roughing lift data storing means and the diameter of said grinding wheel;
second profile data preparing means for preparing **finishing profile** data regulating feed movement of said grinding wheel relative to rotation of said main spindle at finishing, from said lift. . . grinding wheel numerically to perform finish grinding at a speed lower than said high speed on the basis of said **finishing profile** data.

CLAIMS:

CLMS(2)

2. . . . further comprising,

roughing profile data storing means for storing the roughing profile data generated by first profile data preparing means, and **finishing profile** data storing means for storing the **finishing profile** data generated by second profile data preparing means.

CLAIMS:

CLMS(9)

9. . . .
main spindle supporting said workpiece during rough grinding, from said roughing lift data and the diameter of said grinding wheel;
preparing **finishing profile** data regulating feed movement of said grinding wheel relative to rotation of said main spindle during finish grinding, from said. . . said grinding wheel to perform finish grinding at a speed slower than said high speed on the basis of said **finishing profile** data.

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3. 4,291,564, Sep. 29, 1981, Method of and apparatus for rolling sheet steel profiles of different cross-sectional shape in universal beam rolling mill trains; Heinz Muckli, 72/234, 177, 225 [IMAGE AVAILABLE]

US PAT NO: 4,291,564 [IMAGE AVAILABLE] L5: 3 of 5

CLAIMS:

CLMS(1)

I . . .

instance by means of reversing operation and in plural sequences of passes, the material then being rolled to the final **finishing profile** in a following finishing rolling mill, the improvement comprising the following steps taking place continuously an unidirectionally:
initially preliminary bending. . .

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4. 3,948,122, Apr. 6, 1976, Automatic programmed profile lathes; Helmut Link, et al., 82/11.4 [IMAGE AVAILABLE]

US PAT NO: 3,948,122 [IMAGE AVAILABLE] L5: 4 of 5

DRAWING DESC:

DRWD(5)

FIGS. 4, 5 and 6 are diagrams representing the working course of rough cuts and **finishing profile** cuts made with the apparatus of the present invention.

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5. 3,815,305, Jun. 11, 1974, FRAME CONSTRUCTION ASSEMBLY INCLUDING MODULE ELEMENTS FOR ERECTING BUILDINGS IN SECTIONS; Geir Grung, et al., 52/264, 281, 283 [IMAGE AVAILABLE]

US PAT NO: 3,815,305 [IMAGE AVAILABLE] L5: 5 of 5

DETDESC:

DETD(8)

The . . . panels are provided with vertical, cylindrical borings for said screws 40. On the outside of the top girder 5 a **finishing profile** 6 having a similar recess as the roof panels is arranged. The top girder 5, the **finishing profile** 6 and the roof panel 30 form a chute which e.g. may be covered by plastic cloth 41 with plastic. . .

an adhesive tape or the like 43 and placed below a fitting means 44 covering the end portion of the **finishing profile** and proceeding downwards over the **finishing profile** towards the chute. In this manner a very simple and sturdy gutter has been provided.

DETDESC:

DETD(9)

If . . . joint wall elements. The removal stanchions 2 can then be used as outer stanchions for the extension section. Also, the **finishing profile** 6 is moved to the outside of the second section. It is not necessary to use a splice plate 8. . .

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L3       139144 S FLOOR####
L4            7 S L2 AND L3
L5            5 S FINISHING PROFILE#

=> d cit 1- L1
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All no good; They do not teach what a dilation profile is!

1. 5,738,653, Apr. 14, 1998, Balloons for medical devices and fabrication thereof; Leonard Pinchuk, et al., 604/96; 606/194 [IMAGE AVAILABLE]

2. 5,449,371, Sep. 12, 1995, Balloons for medical devices; Leonard Pinchuk, et al., 606/194; 604/96 [IMAGE AVAILABLE]

3. 5,356,591, Oct. 18, 1994, Tailoring expansion properties of balloons for medical devices; Leonard Pinchuk, et al., 264/573, 235, 532, 570 [IMAGE AVAILABLE]

4. 5,304,197, Apr. 19, 1994, Balloons for medical devices and fabrication thereof; Leonard Pinchuk, et al., 606/194; 604/96, 913 [IMAGE AVAILABLE]

5. 5,236,659, Aug. 17, 1993, Tailoring expansion properties of balloons for medical devices; Leonard Pinchuk, et al., 264/573, 235, 532, 570; 604/913 [IMAGE AVAILABLE]

6. 5,223,205, Jun. 29, 1993, Method for manufacturing balloons for medical devices; Stefan Jackowski, et al., 264/521, 235, 530, 532, 905; 425/526, 529, 530, 534 [IMAGE AVAILABLE]

7. 5,156,612, Oct. 20, 1992, Balloons for medical devices and fabrication thereof; Leonard Pinchuk, et al., 606/194; 604/96, 913 [IMAGE AVAILABLE]

8. 5,108,415, Apr. 28, 1992, Balloons for medical devices and fabrication thereof; Leonard Pinchuk, et al., 606/194; 604/96, 913 [IMAGE AVAILABLE]

9. 5,055,024, Oct. 8, 1991, Apparatus for manufacturing balloons for medical devices; Stefan Jackowski, et al., 425/140; 264/530; 425/526, 530, 535 [IMAGE AVAILABLE]

10. 5,017,325, May 21, 1991, Stretch-blow molding method for manufacturing balloons for medical devices; Stefan Jackowski, et al., 264/521, 235, 530, 532, 904; 425/526, 529, 530, 534 [IMAGE AVAILABLE]

11. 4,938,676, Jul. 3, 1990, Apparatus for manufacturing balloons for medical devices; Stefan Jackowski, et al., 425/140; 264/530; 425/526, 530, 535 [IMAGE AVAILABLE]

12. 4,906,244, Mar. 6, 1990, Balloons for medical devices and

fabrication thereof, Leonard Pinchuk, et al., 606/194; 604/96, 913 [IMAGE AVAILABLE]

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(FILE 'HOME' ENTERED AT 12:11:54 ON 30 JUN 1998)

FILE 'USPAT' ENTERED AT 12:12:00 ON 30 JUN 1998
L1   24 S IP-VALUE

=> d cit 15 19

15. 5,034,272, Jul. 23, 1991, Decorative thermosetting laminate; Kent O. Lindgren, et al., 428/331; 156/60, 222; 428/332, 531, 535, 918 [IMAGE AVAILABLE]

19. 4,940,503, Jul. 10, 1990, Process for the production of an abrasion resistant decorative thermosetting laminate; Kent O. Lindgren, et al., 156/279, 278, 324, 335, 390; 162/184; 427/180, 202, 204, 205; 428/208, 904.4, 908.8 [IMAGE AVAILABLE]

=> d cit kwic 15 19

15. 5,034,272, Jul. 23, 1991, Decorative thermosetting laminate; Kent O. Lindgren, et al., 428/331; 156/60, 222; 428/332, 531, 535, 918 [IMAGE AVAILABLE]

US PAT NO: 5,034,272 [IMAGE AVAILABLE]   L1: 15 of 24

DETDESC:

DETD(16)

The abrasion resistance of the laminate obtained was tested in the same way as according to Example 1. An **IP-value** of 600 revolutions was obtained.

DETDESC:

DETD(20)

During . . . paper. The abrasion resistance of the laminate produced was tested in the same way as according to Example 1. An **IP-value** of 2000 revolutions was measured.

19. 4,940,503, Jul. 10, 1990, Process for the production of an abrasion resistant decorative thermosetting laminate; Kent O. Lindgren, et al., 156/279, 278, 324, 335, 390; 162/184; 427/180, 202, 204, 205; 428/208, 904.4, 908.8 [IMAGE AVAILABLE]

US PAT NO: 4,940,503 [IMAGE AVAILABLE]   L1: 19 of 24

DETDESC:

DETD(26)

The abrasion resistance of the laminate obtained was tested in the same way as according to Example 1. An **IP-value** of 600 revolutions was obtained.

DETDESC:

DETD(30)

At . . . paper. The abrasion resistance of the laminate produced was tested in the same way as according to Example 1. An **IP-value** of 2000 revolutions was measured.

DETDESC:

DETD(32)

The . . . g/m.sup.2. The abrasion resistance of the laminate produced was tested in the same way as according to Example 1. An **IP-value** of 3000 revolutions was measured.

DETDESC:

DETD(34)

The . . . g/m.sup.2. The abrasion resistance of the laminate produced was tested in the same way as according to Example 1. An **IP-value** of 4000 revolutions was measured.

DETDESC:

DETD(36)

The . . . 20 g/m.sup.2. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 6000 revolutions was measured.

DETDESC:

DETD(39)

The . . . decor paper. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 1200 revolutions was measured.

DETDESC:

DETD(41)

The . . . decor paper. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 2800 revolutions was measured.

DETDESC:

DETD(43)

The . . . was used. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 2700 revolutions was measured.

DETDESC:

DETD(45)

The . . . decor paper. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 1100 revolutions was measured.

DETDESC:

DETD(47)

The . . . decor paper. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 2500 revolutions was measured.

DETDESC:

DETD(49)

The . . . was used. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 2600 revolutions was measured.

DETDESC:

DETD(51)

The . . . decor paper. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 1000 revolutions was measured.

DETDESC:

DETD(53)

The . . . decor paper. The abrasion resistance of the laminate produced was tested in the same way as in Example 1. An **IP-value** of 2300 revolutions was measured.

DETDESC:

DETD(59)

The . . . the laminate. No overlay paper was used. The laminate was tested in the same way as in Example 1. An **IP-value** of 550 revolutions was measured.

DETDESC:

DETD(61)

The . . . to Example 15 was repeated with the difference that the amount of aluminum oxide particles added was 13 g/m.sup.2. An **IP-value** of 2900 revolutions was measured.

DETDESC:

DETD(69)

The abrasion resistance was tested in the same way as in Example 1. An **IP-value** of 300 revolutions was measured.

DETDESC:

DETD(73)

The . . . were applied in an amount of 62 g/m.sup.2 and the aluminum oxide particles in an amount of 3 g/m.sup.2. An **IP-value** of 2000 revolutions was measured.